change in the parasitic capacitance value of the second touch electrode coupled to the second terminal.

14. The semiconductor device according to claim **13**, wherein the value of the first current changes in response to the change in the parasitic capacitance value between the first touch electrode and the second touch electrode.

15. The semiconductor device according to claim **14**, wherein the change in the parasitic capacitance value of the first touch electrode and the second touch electrode is detected based on the difference value in the count value of the second clock over a counting time in the in-phase period, and the count value of the second clock over a counting time in the reversed phase period.

* * * * *